

A Changing Climate and Wildland Fire Environment in Czechia

Technical Assistance Mission
April 2024

U.S. Team Biographies



John Cataldo became the Wildland Fire and Aviation Officer at Yellowstone National Park in June 2013. Prior to that he served as the Park's Deputy Fire Management Officer for 2 years. John and his 38-person team at Yellowstone are responsible for all wildland fire, aviation, and hazard fuels management operations within the 2.2-million-acre (890,000 hectare) Park. They have earned the NPS Paul Gleason Keeper of the Flame award numerous times over the past decade for their professional management of long duration fires across Yellowstone's complex landscape. Since 2011, John and his team have managed approximately 100,000 acres (40,000 h) of wildland fire in the Park.

John has been rostered as a Strategic Operational Planner with Northern Rockies Incident Management Team #5 since 2016. His other fire management qualifications include Incident Commander Type 3, Burn Boss Type 2, and Division Supervisor.

Prior to coming to Yellowstone, John was a Captain and Superintendent of the Ukonom Interagency Hotshot Crew based on the Six Rivers National Forest in Northern California, a squad leader on the Wolf Creek Interagency Hotshot Crew on the Umpqua National Forest, and the first permanent Fire Helicopter Manager hired at Denali National Park and Preserve in 2000.

John began his 30+ year career in the Federal Service in 1992 performing in a variety of resource management positions focused on fisheries and wildlife conservation at Redwood National Park, Crater Lake National Park, the Chugach National Forest, and Big Cypress National Preserve. He has a Bachelor of Science degree from Humboldt State University in California. His hobbies include ice hockey, hunting, birdwatching, fishing, camping, travel, and all things related to coffee. He resides in Yellowstone with his wife Lisa and their Labrador Retriever, Meg.



Tonja Opperman serves as the Assistant Director of Fire Analytics for the US Forest Service Intermountain Region. This region has 12 National Forests that cover 34 million acres (13.8 million hectares) across the states of Idaho, Utah, Wyoming, Nevada, California, and Colorado. Tonja and her staff support regional initiatives to explore wildfire risk, risk reduction opportunities, fire behavior modeling for prescribed fires, and teaching these skills to others.

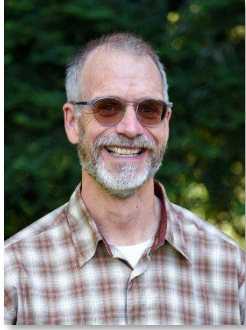
On wildland fire incidents, Tonja fulfills the role of Long-Term Fire Analyst. This position characterizes the landscape, fuels, weather, and values to determine which values might be at risk from a fire's spread and what mitigating actions could be considered to avoid loss. In this effort, Tonja facilitates discussions about risk, land and fire objectives, decision-making, and potential fire behavior with Operations, Strategic Planners, and Agency Administrators. Tonja has also worked on fires in Zambia, New Zealand, and Canada.

Prior to 2020, Tonja was a fire analyst with the Wildland Fire Management Research, Development and Applications group, responsible for providing national fire modeling and decision-making assistance and developing software applications as a subject-matter-expert. Prior to 2008 she was the Fire Ecologist at Yellowstone National Park, the Bitterroot National Forest in Montana, and Grand Canyon National Park in Arizona. Tonja has worked on fires as a firefighter (fire crews, engine crews, and helicopter attack modules) or as a fire analyst since 1994. Tonja was the lead instructor for the US National Geospatial Fire Analyst course (S-495) from 2008-2020.

Tonja is a member of the National Wildfire Coordinating Group Fire Behavior Subcommittee, a 14-member group that provides national leadership in fire behavior assessments and predictions. This includes development of standards for those engaged in fire behavior predictions, developing training curricula, and providing technology transfer regarding new fire modeling practices.

Tonja earned a Master of Science from Yale University, and a Bachelor of Science from Michigan Technological University. When not working, Tonja spends her time painting in watercolor, acrylic, and encaustic (wax). She also enjoys travel, birdwatching, hiking, gardening, and reading. She lives with her husband Todd in Gardiner, Montana on the northern border of Yellowstone National Park. Their son, Zander, is a junior at university and calls when he needs money.





Nate Benson

In 2021, Nate retired from his 34-year career with the National Park Service (NPS), where he served as the NPS Lead for Wildland Fire Science and Ecology. His position was located at the National Interagency Fire Center (NIFC) in Boise, Idaho, where he helped facilitate collaboration and cooperation among federal wildland fire management programs. His primary responsibilities included overseeing several NPS program areas, including fire Geographical Information Systems (GIS) and geospatial analysis; fire ecology and fire effects monitoring; post-fire burned area rehabilitation and restoration; smoke management; and the Remote Automated Weather System (RAWS). He also led the development and implementation of the NPS Wildland Fire 2020-2024 Strategic Plan and assisted with developing NPS and federal wildland fire policies and guidance. During his NPS career, he worked in a variety of wildland fire positions at Glacier, Yellowstone, Great Smoky Mountains, and Everglades National Parks. At these parks, Nate's focus was on the planning and implementation of prescribed fires and managing wildfires. He has maintained his Prescribed Fire Burn Boss 2 qualification and continues to support wildfire incidents as a Strategic Operational Planner.

Nate was one of the pioneers of the NPS Wildland Fire Module Program. He also helped develop and grow the Monitoring Trends in Burn Severity (MTBS) Program, an interagency program with the goal of consistently mapping the burn severity and extent of large fires across the United States from 1984 to the present. Nate also oversaw the development of FFI, an interagency plot-level monitoring software application designed to assist managers with the collection, storage, and analysis of ecological information.

For 9 years, Nate served as the Chair of the Joint Fire Science Program (JFSP) Governing Board. The JFSP provides funding and science delivery for scientific studies associated with managing wildland fire, fuels, and fire impacted ecosystems to respond to emerging needs of managers, practitioners, and policymakers from local to national levels.

In 2022, Nate joined Sonoma Technology in a part time position to support the company's work in wildland fire and smoke sciences. His focus is on pre-fire planning, prescribed fire and fuels management support, using data to support decision-making processes, wildland fire litigation, and the development of wildland fire software applications. Also, Nate continues to assist NPS with FFI and MTBS.

Nate is a University of Wisconsin-Madison's Institute for Environmental Studies graduate with a M.S. in Land Resources and a B.A. in Ibero-American Studies. Nate lives in Boise with his wife Jessica. He likes to spend time with Jessica, his three sons, and two dogs. He enjoys mountain biking, cross country skiing, gardening, and pickleball.

Melissa Forder is the National Fire Planner for the National Park Service, providing leadership on fire planning policy for 320 National Parks. Melissa leads the Wildland Fire Planning and Compliance Committee which coordinates the development and review of a park's fire management plan. These plans shaped by professional fire management knowledge and insights into park resources, visitor patterns, weather conditions, and ecological factors, outline strategies and tactics to safeguard values-at-risk and achieve resource and park management objectives.

Melissa is a Type 1 Planning Section Chief on the Southern Area "Blue" Incident Management Team and has worked on Incident Management Teams since 2011. Her additional fire qualifications include Resource Advisor, Crew Boss, Firing Boss and Agency Representative.

Melissa has worked for the National Park Service for 25 years. She has a Bachelor of Science degree in Environmental Science and Forest Biology from State University of New York, College of Environmental Science and Forestry. She began her career in 1998 working at Shenandoah National Park in resource management monitoring long term forest change. In 2000 she transitioned her career to wildland fire as the Lead Fire Effects Monitor, leading a crew in the collection of monitoring data and then as the Fire Ecologist. In 2015, Melissa assumed the position of Deputy Regional Fire Management Officer for the Southeast Region, overseeing fire planning, fire ecology, and fuels programs across 59 park service units across the southeast.

Melissa has served in other capacities including the Operations Program Lead at the National Interagency Fire Center during the busy fire season of 2021 and the Science and Ecology Program lead in 2023. Currently, Melissa is embarking on a detail with the Department of the Interior, Office of Wildland Fire, focusing on Fuels Management and Post Fire policy.

Outside of her professional endeavors, Melissa, along with her husband Norm, resides in Virginia, with their two teenage daughters. They spend most of their time attending their daughters' volleyball and soccer games around the state.



Todd Opperman, after a 29 year fire career, retired from Yellowstone National Park in 2021 as the Deputy Wildland Fire Management Officer. Todd continues to work during the fire season as a Strategic Operational Planner where his mission is to help Wildland Fire Managers to describe their operational “why” to align with risk and resource management plans. He has spent much of his career managing wilderness fires as a benefit to the ecosystem.

During his eight years at Yellowstone National Park, Todd supervised fire operations of the engine crew, helicopter crew, lookout, fire dispatchers and hazard fuels reduction activities. During fire season 2016, Todd was a fire manager and Incident Commander of several fires that grew to over 25,000 hectares of Yellowstone National Park, the largest burned area since the 1988 Yellowstone Fires. Most of the fires were burning without suppression actions and allowed to spread for the benefit of the ecosystem. This was accomplished without closing any public roads. Todd was also instrumental in starting a mechanical fuels program using heavy equipment to treat 40 hectares per year around urban Park developments.

Prior to Yellowstone National Park, Todd worked for the Gallatin National Forest, Bitterroot National Forest, New Zealand Forest Research Institute and Grand Canyon National Park working on wildland engines and as a Fire Helicopter Manger.

Todd has a Bachelor of Science degree in Forestry from Michigan Technological University. His hobbies are hunting, travel, beer brewing and woodworking. He lives in Gardiner, Montana just outside Yellowstone National Park with his wife, Tonja. Their son is attending Stanford University and without encouragement from his parents, pursuing fire ecology.

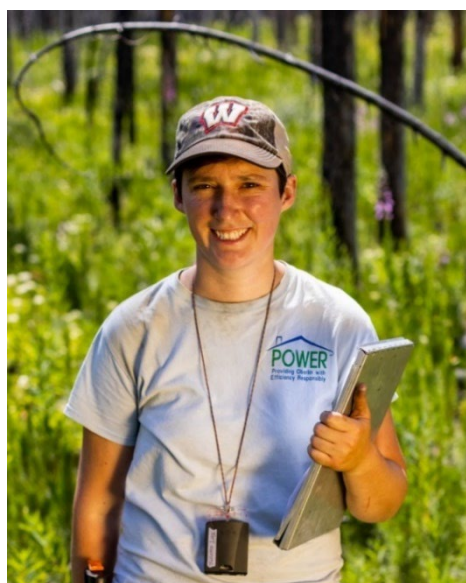


Dr. Kristin Brazionas is a Postdoctoral Researcher at the Technical University of Munich, Germany in the Ecosystem Dynamics and Forest Management Group. She researches how interactions between changing climate and increasing disturbance activity affect forested mountain landscapes, with a focus on the Northern Rocky Mountains (Greater Yellowstone Ecosystem) in the United States and the Northern Limestone Alps (Berchtesgaden National Park) in Germany. She uses a combination of next-generation forest simulation modeling, remote sensing, and field data collection to answer questions such as: (1) What amount and configuration of forest fuels treatments effectively reduces fire risk in a wildland urban interface landscape (Brazionas et al. 2021)? (2) How are forest regeneration, fuel accumulation, and burn severity affected by fires that occur more frequently than in the past (Brazionas et al. 2022, 2023)? And, (3) how will understory plant biodiversity change over the 21st century (Brazionas et al. 2024)?

Kristin has over eight years of experience as a forest, fire, and landscape ecologist. She received her PhD from the University of Wisconsin-Madison (USA) in 2021, her MS from UW-Madison in 2018, and her BA from Oberlin College (Ohio, USA) in 2008. She has leveraged over \$200,000 in funding to support her research as a lead or co-investigator and published 13 peer-reviewed papers (five as first author). Her full CV is available at:

<https://kristinbrazionas.netlify.app/uploads/BrazionasKristinCV.pdf>

Prior to her career in science, Kristin was a climate and sustainability program director in non-governmental organizations in Ohio, USA for eight years. During this time, she also worked for eight years as a part-time structural firefighter for a small city, where she achieved the rank of Lieutenant and was certified as a Fire Investigation Technician, Blue Card Incident Commander, Firefighter II, and Emergency Medical Technician.



Kristin currently lives in Freising, Germany with her husband Paul. She was born and raised in Seattle, Washington, USA, prior to moving to the Midwest (Ohio and Wisconsin) for university. Many of her interests involve spending time outdoors and include hiking, camping, rock climbing, and hunting. Since moving to Europe for the postdoctoral fellowship, she has prioritized traveling to different cities and landscapes in Central Europe and has spent time doing field work in forests in Germany, Czechia, Slovakia, and Slovenia.

Photographer credit: Sofia Jaramillo

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Tom Olliff is the National Park Service (NPS) Intermountain Region Climate Change Adaptation Coordinator; he helps 85 parks in eight states from Montana to Arizona understand climate science and work toward managing climate impacts on resources, visitors, and park buildings and roads. Tom previously served as the Chief of Yellowstone Park's Science and Resource Management Division, where he managed Yellowstone's bear, wolf, elk, bison, geology, archeology, and fish programs. Tom spent 32 years living and working in Yellowstone as a park ranger, biologist, wildland and structural firefighter, and on a backcountry trail crew.

Tom is the co-lead on a joint NPS and U.S. Geologic Survey (USGS) project to develop and incorporate climate change vulnerability assessments into fire plans and fuels treatments; serves on the NPS Fire-Climate Workgroup to develop practices for managing more extreme wildland fire under climate change; and is on the Advisory Board of the [Northern Rockies Fire Sciences Network](#) to facilitate knowledge exchange among managers and scientists by bringing people together to strengthen collaborations, synthesize science, and enhance science application to critical fire and fuels management issues. He is also on the Stakeholder Advisory Committee of the [USGS North Central Climate Adaptation Science Center](#).

He has a B.S. in Forest Management from Auburn University and an M.S. in Resource Conservation from the University of Montana. His hobbies include hiking, Nordic skiing, birding, and playing bluegrass guitar. He lives in Bozeman, Montana, with his wife Peggy and their (very large) Alaskan Malamute, Togo.

